Docket No.: PF-0321-2 DIV

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"Express Mail" mailing label number <u>EL. 743.381 795 US</u> 1 hereby certify that this document and referenced attachments are being deposited with the United States Postal Service "Express Mail Bost Office to Addresses" service under 37 CPR § 1.10 on the date indicated and is addressed to: Commissioner for Patents, Box Patent Application, Washington, Dc. 20231 on <u>January 74. 2001</u>.

By Martine Printed: Ted Martinez

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Bandman et al.

Title: DISEASE ASSOCIATED PROTEIN KINASES

Serial No.: To Be Assigned Filing Date: Herewith

Examiner: To Be Assigned Group Art Unit: To Be Assigned

Official Draftsman

Commissioner for Patents

Washington, D.C. 20231

SUBMISSION OF FORMAL DRAWINGS

Sir:

Transmitted herewith are Figure(s)1A, 1B, 1C, 2A, 2B, 3A, 3B, 4A, 4B, 5A, 5B, 6A, 6B,

7A, and 7B, as fifteen (15) sheets of formal drawings for this application. Each sheet of drawing indicates the identifying indicia suggested in 37 CFR Section 1.84(c) on the reverse side of the drawings.

Applicants believe that no fee is due with this paper. However, if the Commissioner determines that a fee is necessary, the Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 09-0108. A duplicate copy of this communication is enclosed.

If there are any questions regarding the above, the Examiner is invited to call the undersigned at 650-855-0555.

Respectfully submitted,

INCYTE GENOMICS, INC

ate: January 24, 2001

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3160 Porter Drive Palo Alto, California 94304 Phone: (650) 855-0555 Fax: (650) 845-4166

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\leftarrow	MELLRTITYOPAASTKMCEQALGKGCGADSKKKRPPOPPE DARK-1	DAPK-1
\vdash)	g1488263
2	ESOPPOSOAOVPPAAPHHHHHHHHGGPEISRIIVDPTTGK] DAM-1 GRLITDPRSGR 914882	DAPK-1 g1488263
8 8	RYCRGKVLGKGGFAKCYEMTDLTNNKVYAAKIIPHSRVAKI TYLKGRLLGKGGFARCYEATDTETGSAYAVKVIPQSRVAK	DAPK-1 g1488263
121	PHOREKIDKEIELHRILHHKHVVOFYHYFEDKENIYILLE PHOREKILNEIELHRDLOHRHIVRFSHHFEDADNIYIFLE	DAPK-1 g1488263
161 102	Y C S R R S M A H I L K A R K V L T E P E V R Y Y L R Q I V S G L K Y L H E Q E L C S B K S L A H I W K A B H T L L E P E V R Y Y L R Q I L S G L K Y L H Q R G	DAPK-1 g148826
201 142	I L H R D L K L G N F F I N E A M E L K V G D F G L A A R L E P L E H R R R T I I L H R D L K L G N F F I T E N M E L K V G D F G L A A R L E P P E Q R K K T I	DAPK-1 g1488263

FIGURE 1A

g1488263 g1488263 g1488263 DAPK-1 DAPK-1 DRPSLDDIIRHDFFLOGFTPDRLSSCCHTVPDFHLSSPA DRPSIDQIIRHDFFTKGYTPDRLPISSCVTVPDLTPPNPA KNFFKKAAAALFGGKK<u>DKARYIDTHNRVSKEDEDIYK</u>LRH RSLEAKVTKSLFGRKKGKNH-----AQERDEVSGLVS 241 | C G T P N Y L S P E V L N K Q G H G C E S D I WAL G C V M Y TM L L G R P P F 182 | C G T P N Y V A P E V V L L R Q G H G P E A D V W S L G C V M Y T L L C G S P P F 281 BTTNLKBTYRCIRBARYTMPSSLLAPAKHLIASMLSKNPB 222 BTAPLKBTYRCIKQVHYTLPASLSLPARQLLAAILRASPR

DAPK-1 g1488263

DLKKTSITOOPSKHRTDEELOPPTTTVARSGTPAVENKOO GLMRTSVGHODARPEAPAASGPAPVSL - - - - - - - LVETAPE

I G D A I R M I V R G T L G S C S S S S C L E D S T M G S V A D T V A R V L R D S S P - - - - - R G T L A S S G D G F E - - E G L I V A T V V E S A L C A L R

FIGURE 1B

g1488263 | G C L E N M P E A D C I P K E | O L S T S F Q W V T K W V D Y S N K Y G F G Y Q N C I A F M P P A E Q N P A P L A Q P E P L V W V S K W V D Y S N K F G F G Y O

g1488263 LSDHTVGVLFNNGAHMSLLPDKKTAHY<u>YAELGOCSVFPAT</u> LSSRRVAIVLFNDGTHMALLSANR<u>KT</u>VHYNPTSTKHFSESVG 441

g1488263 DAPK-1 | DAPEOFISOVIVLKYFSHYMBENLMDGGDLPSVIDIRRP| -AVERALQPOLGILNYEAS|YMEQHLMKGGDLPSVBEVENBA

g1488263 DAPK-1 RLYLLQWLKSDKALMMLFNDGTFQVNFYHDHTKII<u>ICSON</u> PPLLLQWVKTDQALLMLSDGTVQVNFYGDHTKLILSG-W

g1488263 EEYLLTYINEDRISTTFRLTTLLMSGCSSELKNRMEYALN BPLLVTFVARNRSACTYLASHLRQLGCSPDLRQRLRYALR

679 MLLORCI-IN 600 LLRDRSPA

DAPK-1 g1488263

FIGURE 1C

THE RESERVE OF THE PARTY OF THE

- q1827450 DAPK-2 - NEKYKLPIPFPEGKVLDDMEGNOWVLGSSAKRHLAREQEAVGEIITDMAKKEWKVG ı MPRVKAAQAGRQ ı ı ı ı MPPKR
- g1827450 TNKPEKDARHVVKVEYQENGPL SESVGSDAPCVVKVEPSDNGPL - - F P KKIGSGGFGLIYLA - FP LPIGQGFGCIYLADMNS **82** 4
- g1827450 ELKFYQRVAKKDCIKKWIERKQLDYLGIPLFYGSGLTE ELKFYQRAAKPEQIQKWIRTRKLKYLGVPKYWGSGLHD Ω[⊢ [± 건정
- FKGRSYRFMVMERLGIDLQKISGONGT]-FKKSTVLQLGIR KNGKSYRFMIMDRFGSDLQKIYEANARRFSRKTVLQLSLR 121
- g1827450 150 MLDVLEYIHENEYVHGDVKAANLLLGYKNPDQVYLADYGL 161 1LDJLEYIHEHEYVHGDJRASNLLLNYKNPDQVYLVDYGL
- g1827450 SYRYCPNGNHKOYOENPRKGHNGTIEFTSLDAHKGVGEIA AYRYCPEGVHKEYKEDPKRCHDGTIEFTSIDAHNGVAP - -

FIGURE 2A

230 OFLVCAHSLAYDEKPNYOALKKILNPHGIPLGPLDFSTKG	DAPK-2
239SRRG-DLEILGYC-MI	g1827450
270 OSINVHTPNSOKVDSOKAATKOVNKAHNRLIEKKVHSERS	DAPK-2
253 OWLTGHLPWEDNLKDPKYVRDS	g1827450
310 AESCATWKVOKEEKLIGLMNNEAAOESTR - RROKYOESOE	DAPK-2
275 LIRYRENIASLMDKCFPEKNKPGEIAKYMETVK	g1827450
349 PLNEVNSFPOKISYTOFPNSFYEPHODFTSPDIFK KS	DAPK-2
308 LLD YTEKPLYENLRDILLQGLKAIGSKDDGKLDLSV	g1827450
386 <u>RSPSWYKYTSTVSTGITDLESSTGLWPTISOFTLSETNA</u>	DAPK-2
344 VENGGL <u>K</u> AKTITKKRKKEI <u>EES</u> KE - PIGVEDTEWSNTQTE	g1827450
426 <u>DVYYYRIIIPVLLMLVFLALFFL</u>	DAPK-2
382 EAIQT <mark>R</mark> SRTRKRVQK	g1827450

FIGURE 2B

q303804 g303804 g303804 g303804 g303804 EAKRIPEEILGKVSIAVLRGLAYLREKHQIMHRDVKPSNI FARK-3 EAKRIPEDILGKVSIAVLRGLAYLREKHQIMHRDVKPSNI 9303804 DAPK-3 DAPK-3 DAPK-3 DAPK-3 VLHECNSPYIVGFYGAFYSDGEISICMEHMDGGSLDHLLK VLHECNSPYIVGFYGAFYSDGEISICMEHMDGGSLDQVLK IKPAIRNQIIRELQ IKPAVRNOIIRELO SEGASEANLVDLQKK SEGASEAHLVDLOKK Ø ELKDDDFERISELGA L G ш Ø Н ĸ FI EI Д KDD E L J LE GNGGVVTK<u>VO</u>HRPSGLIMARKLIHLE GNGGVVTKARRPSGLIMARKLIHLE \vdash IAEGPSPT \ G OKAKVG д Ø ΑK Д 5 × ы Ø Ø Н Н н Ä Г Н H A F AF N P INP ELELDEQQKKRLE ELDLDEQQRKRLE Н LI VLPALT Ø LARRKPVLP LARRKP шш 121 161 121 161 44 ᄧᄧ

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FIGURE 3A

2 kg + g - 12 o

q303804 g303804 q303804 q303804 q303804 201 LVNSRGEIKLCDFGVSGQLIDSMANSFVGTRSYMAPERLQ DAPK-3 201 LVNSRGEIKLCDFGVSGQLIDSMANSFVGTRSYMS|PERLQ 9303804 DAPK-3 DAPK-3 DAPK-3 DAPK-3 361 KMLTNHTFIKRSEVEEVDFAGWLCKTLRLNQPGTPTRTAV 361 KILTNHAPIKRSBGEDVDFAGWLCRITLRLKQPSTPTRTAV I V N E P P P K L P N G V F T P D F Q E F V N K C L I K N P A E R A D L I V N E P P P K L P S G V F S S D F Q E F V N K C L I K N P A E R A D L SVOSDIWSMGLSLVELAVGRYPIPPPDAKELEAIFG SVOSDIWSMGLSLVELAIGRRYPIPPPDAKELEASIG RPVVDGEEGEPHSISPRPPGRPVSGHGMDSRPAMAIFE RPVVDGADGEPHSVSPRPPGRPISGHGMDSRPAMAIFE LLDY GTHY GTHY LLDY 241 241

FIGURE 3B

g854170 g854170 g854170 g854170 g854170 g854170 121 | LRKSDMLEKEQVAHIRAERDILVEADGAWVVKMFYSFQDK | DAR-4 120 | LRKADMLEKEQVGHIRAERDILVEADS LWVVKMFYSFQDK 9854170 161 RNLYLIMEFLPGGDMMTLLMKKDTLTEBETQFYISETVLA DARK-4 160 I<u>NLYLIMEFLPGGDMMTLLMKKDTLTEBETQFYI</u>AETVLA 985417(201 IDAIHQLGFIHRDIKPDNLLLDAKGHVKLSDFGSCTGLKK DAR4-4 200 IDSIHQLGFIHRDIKPDNLLLDSKGHVKLSDFGLCTGLKK 9854170 MAMTAGTTTFPMSNHTRERVT<u>VAKL</u>TLENFYSNLILQHE DAR44 <u>MAMT</u>-GSTPCSS<u>MSNHT</u>KERVTMTKVTLENFYSNLIAQHE 985417 ERETROKKLE<u>VA</u>MEEEGLADEEKKLRRSOHARKETEFLRL PAPK-4 <u>ERBMROKKLB</u>KV<u>MEEEGL</u>K<u>DEERRLRRSAHARKETEFLRL</u> 9854170 KRTRLGLDDFESLKVIGRGAFGEVRLVHKKDTGHLYAMKI KRTRLGLEDFESLKVIGRGAFGEVRLVQKKDTGHVYAMKI 985417 ಷ & 48 \leftarrow

FIGURE 4A

g854170 DAPK-4 241 AHRTEFYRNLTHNPPSDFSFQNMNSKRKAETWKKNRRQLA 240 AHRTEFYRNLNHSLPSDFTFONMNSKRKAETWKRNRRQLA

g854170 DAPK-4 Y STVGTPDYIAPEVFMQTGYNKLCDWWSLGVIMYEMLIGY FSTVGTPDYIAPEVFMOTGYNKLCDWWSLGVIMYEMLIGY 281 X S T V G

g854170 DAPK-4 321 PPFCSETPQETYRKVMNWKETLVFPPEVPISEKAKDLILR 320 PPFCSETPQETYRKVMNWKETLTFPPEVPISEKAKDLILR

g854170 DAPK-4 361 FCIDSENRIGNSGVEEIKGHPFFEGVDWEHIRERPAAIPI 360 FCCEWEHRIGAPGVEEIKSNSFFEGVDWEHIRERPAAISI

g854170 401 EIKSIDDTSNFDDFPESDILOPVPNTT - - EPDYKSKDWV DAR44 400 EIKSIDDTSNFDEFPESDILKETVALSNHPETDYKNKDWV 9854170

438 FLNYTYKRFEGLTORGSIPTYMKAGKL 440 FINYTYKRFEGLTARGAIPSYMKAAK

LAPK-4 g854170

FIGURE 4B

g790790 g790790 TEDVHESPELLYLAMELVTGGELFDRIMERGSYTEKDASH DARK-5 LDDIYESGGHLYLIMQLVSGGELFDRIVEKGFYTERDASR 9790790 GSAHLVALKCIPKKALRGKEALVENEIAVLRISHPNIVA DARK-5 RTQKLVAIKCIAKEALEGKEGSMENEIAVLHKIKHPNIVA 9790790 195 VWALGVISYILLCGYPPFYDESDPELFSQILRASYEFDXP DAPK-5 201 CMSIGVIAYILLCGYPPFYDENDAKLFBQILKABYEFDSP 9790790 156 SDFGLSKIIQ-AGNMLGTACGTPGYVAPELLIEQKPYGKAVD DAPK-5 161 SDFGLSKMEDPGSVLSTACGTPGYVAPEVLAQKPYSKAVD 9790796 g790790 116 LVGQVLGAVSYLHSLGIVHRDLKPENLLYATPEBDSKIMVJ DAPK-5 121 LIFQVLDDAVKYLHDLGIVHRDLKPENLLYYSLDEDSKIMI 9790799 MLLLK - - - - - KHTEDISSVYEIRERLGSGAFSEVVLAQER DARK-5 MLGAVEGPRWKQAEDIRDILYDFRDVLGTGAFSEVILAEDK G790790 92 8 4

FIGURE 5A

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g790790

g790790 235 FWDDISESGKDFIRHLLBRDLQKRFTCQQALRDLWIFWDT DARK-5 241 YWDDISDSAKDFIRHLMEKDPEKRFTCEQALQHPWIAGDT 9790790

g790790 275 GFGRDILGFVSEQIRKNFAWTHWRRAFNATLFLRHIRKL - DAPK-5 281 ALDKNIHQSVSEQIKKNFAKSKWKQAFNATAVVRHMRKL OG 9790790

g790790 ------ DAPK-5 314 - GOIPEGEG--ASBOGNXRHSHXG---------321 LGTSOEGOGOIASHGELLTPVAGGPAAGCCCRDCCVEPGT g790790

DAPK-5

335 - LRAGOPPKW 361 ELSPTLPHOL FIGURE 5B

ILASVLRSGPGGLPLRPLLGPALALRARSTSATDTHHVV	KIIEKWVDFAKK 924761
	201 RMLATHHLALHEDKPDFVGIICTRLSPKK 177 RMLATHHLALHEDKPDFVGIICTRLSPKK

4 - 3

FIGURE 6A

LCEHKYGNAPRVRINGHVAARFPFIPMPLDYILPELLKNA DAR-6	MRATMESHLDTPYNVPDVVITIANNDVDLIIRISDRGGI DAPK-6	221 AHKDLDRVMDYHFTTAEASTQDPRISPLFGHLDMHSGAQS DAPK-6	GPMHGFGFGLPTSRAYAEYLGGSLQLQSLQGIGTDVYLRL DAPK-6	231 G I E I I I I I I I I I I I I I I I I I
, CEHKYGNAPRVRINGHVAARFPFIPMPLDYILPELLKNA 9924921	MRATMESHLDTPYNVPDVVITIANNDVDLIIRISDRGGI 9924921	291 AHKDLDRVMDYHFTTAEASTQDPRISPLFGHLDMHSGGOS 9924921	CPMHGFGFGLPTSRAYAEYLGGSLQLQSLQGIGTDVYLRL 9924921	
241 LCEHK		321 A H K D L 291 A H K D L	361 G P M H G	401 R H I D G 371 R H I D G

FIGURE 6B

record to

200000000000

g1335856 EAVEDSE - - - - - - - - | SGVYMRFMRSHKCYD DAPK-7 SPAVENEH PQETPESNNSVYTSFMKSHRCYD 913358! MLEKLEFEDEAVEDSE Ø Д S METVI -

g1335856 DAPK-7 I V P T S S K L V V F D T T L Q V K K A F F A L V A N G V R A A P L W E S K K Q L I I P T S S K L V V F D T S L Q V K K A F F A L V T N G V R A A P L W D S K K O 8 4

g1335856 SFVGMLTITDFINILHRYYKSPMVQIYELEEHKIETWREL DAPK-7 SFVGMLTITDFINILHRYYKSALOOIYELEEHKIETWREV 913358 22 28

g1335856 112 YLQETFKPLVNISPDASLFDAVYSLIKNKIHRLPVIDPIS DAPK-7 121 YLQDSFKPLVCISPNASLFDAVSSLIRNKIHRLPVIDPES 913358

152 GNALYILTHKRILKFLOLFMSDMPKPAFMKONLDBLGIGT DAPK-7 161 GNTLYILTHKRILKFIKLFITEFPKPEFMSKSLFELQIGT 91335856

FIGURE 7A

g1335856 DAPK-7 192 Y H N I A F I H P D T P I I K A L N I F V E R I S A L P V V D E S G K V V D I 201 Y A N I A N V R T T T P V V A L G I F V Q H R V S A L P V V D E K G R V V D I

g1335856 232 | Y S K F D V I N L A A E K T Y N N L D I T V T Q A L Q H R S Q Y F E G V V K C M DAPK-7 241 | Y S K F D V I N L A A E K T Y N N L D V S V T K A L Q H R S H Y F E G V L K C Y 913358

g1335856 272 KLEILETIVDRIVRAEVHRLVVNNEADSIVGIISLSDILQ DARK-7 281 LHETLETIINRLVEAEVHRLVVVDENDVVKGIVSLSDILQ 913358

312 ALILTPAGAKOKETETE 321 ALVLTGGEKKP

g1335856

DAPK-7

FIGURE 7B